

Secondary syphilis with framboesiform lesions

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Abstract

An unusual case of secondary syphilis is presented. A 40 year old Chinese male presented with a one-month history of a scaly scalp with purulent discharge, and crusted papules and nodules on the face, body and genitals. A diagnosis of secondary syphilis was confirmed, and he responded rapidly to treatment.

Clinical lesions of secondary syphilis may present in many different forms.¹ Although atypical presentations are not uncommon, the hypertrophic, nodular and vegetative form or the framboesiform syphilide is rarely reported. An unusual case of the keratopustular variety of framboesiform syphilis was described by Lejman² in 1977, and another case was reported by Beck *et al*³ in 1981. We now report another case with this unusual presentation.

Case report

A 40 year old Chinese male presented to our dermatological department in October 1988 with a one month history of a scaly scalp with pus, and crusted lesions on the face and the body. He had been treated by various private practitioners without improvement. On direct questioning, he had had a sexual exposure with a female prostitute 4 months prior. There was no history of a penile ulcer subsequently.

Clinical examination showed multiple crusted papules and nodules on the face, especially over the eyebrows, nasolabial folds, the chin and around the nostrils (fig 1). Similar lesions were present around the hair line and on the back of the neck. Moist, smooth papules, some with crusts were present on the trunk, the groins, the penile shaft and on the glans (fig 2). The lesions were very foul-smelling. The scalp was scaly, crusted, and oozing with pus and serum. On the palms and soles were small pink papules with fine scaly borders. Multiple small, mobile lymph nodes were palpable at the neck, axillae and groins. The liver and spleen were not palpable. No lesions were seen in the oral cavity.

The initial differential diagnoses were impetigo or secondary syphilis. The differential diagnoses given by the referring doctor were infected chickenpox, psoriasis and seborrhoeic dermatitis.

His haemoglobin level was 12.6 g/dl, total white count 17,000/mm³, differential count neutrophils 58%, lymphocytes 19%, monocytes 7%, and eosinophils 16%, platelet count was normal. ESR was 50 mm in 1 hour. Darkground examination of the lesion at the glans penis was positive for *Treponema pallidum*, while the darkground examination of a lesion from the abdomen was negative. Swab from the lesion for pyogenic culture grew *Staphylococcus aureus*, sensitive to cephaloridine, cloxacillin, erythromycin, methicillin, trimethoprim/sulphamethoxazole, and clindamycin, and not sensitive to ampicillin, penicillin G, or tetracycline. Venereal Disease Research Laboratory (VDRL) test was reactive in 1:2048 dilution. *Treponema pallidum* haemagglutination test was reactive. Anti HIV screening test (EIA) was non-reactive. Skin biopsy of a lesion from the abdomen showed parakeratosis with scaly crusts, irregular epidermal hyperplasia with spongioform pustules and infiltration of neutrophils and lymphocytes within the epidermis. The dermo-epidermal junction was obscured by a dense lichenoid infiltrate of plasma cells, eosinophils, neutrophils and lymphocytes. The histology was consistent with secondary syphilis. Urethral smear showed pus cells 80-100 per field, and epithelial cells 1-2. Urethral smear for gonococcal culture was negative.



Figure 1 Multiple keratopustular papules and nodules on the face.



Figure 2 Moist keratotic and smooth-topped papules on the groins, thighs and penile shaft. Mucous patches on the glans penis.

The patient received 2 doses of intramuscular 2.4 mega units Benzathine Penicillin given at a week's interval. The lesions started to heal after the first injection, and was completely healed after the second injection leaving hyperpigmentation. A repeat urethral smear one week after the first injection showed only epithelial cells 3-4. At one month follow-up, the VDRL titre dropped to 1:512 dilution, at 3 months it was 1:64, and at 6 months it was 1:32.

Discussion

It is well known that secondary syphilis may present with various clinical forms, and atypical presentations may occur.¹ However, the framboesiform syphilide is rarely reported. Descriptions from the old literature included the vegetating, nodular and tumorous forms with abundant foul secretion described by Kaposi in 1891, the ulcerated, raspberry-like lesions described by Marian, or the keratotic and verrucous lesions described by Demjanovitsch.² The main clinical features are thought to include ulceration, vegetation, and crust formation, especially of the scalp.

Our patient fits well with the description of framboesiform syphilide. The lesions were particularly foul-smelling. His scalp was significantly affected and was secondarily infected with *Staphylococcus aureus*. The lesions were crusted and infiltrated with a verrucous surface. Pustulation was seen as in the case reported by Lejman.²

The diagnosis of secondary syphilis was made in this case helped by the presence of lesions on the palms and soles, the moist condylomatous lesions on the genitals, the distribution of lesions over the nasolabial folds and along the hairline fitting the description of corona veneris. However, like the case reported by Beck *et al*,³ this case was misdiagnosed which partly accounts for the late referral to the dermatological department. The involvement of the scalp and the symmetrical, scaly lesions on the trunk often cause the diagnosis of psoriasis to be made. In this case, the amount of pustulation was so significant that even impetigo and infected chickenpox was considered by the general practitioners who attended him. It is known that the pustular form of secondary syphilis can mimic impetigo or infected eczema, and can at times resemble smallpox. In fact, it was at one time called the Great Pox.¹

This case serves to remind us that unusual forms of secondary syphilis are still seen at a skin clinic, and the diagnosis should not be missed.

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1 Knox JM, Rudolph AH. Acquired Infectious Syphilis. In: Holmes KK, Mardh PA, Sparling PF, Weisner PJ, eds. *Sexually Transmitted Diseases*. New York: McGraw-Hill, 1984:305-13.

2 Lejman K, Starzycki Z. Keratopustular variety of framboesiform syphilis: A case report. *Br J Venereal Dis* 1977;53:195-9.

3 Beck MH, Hubbard HC, Dave VK, Haye KR. Secondary syphilis with framboesiform facial lesions. A case report. *Br J Venereal Dis* 1981;57:103-5.

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